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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,622	11/09/2001	Giacomo Stefano Roba	05788.0189	5933

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EXAMINER

HOFFMANN, JOHN M

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/986,622	Applicant(s) ROBA ET AL.	
	Examiner John Hoffmann	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-50 is/are pending in the application.
- 4a) Of the above claim(s) 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-33 and 46-50 is/are rejected.
- 7) ☒ Claim(s) 34-45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lysson et al (5,897,681) in view of 08091862 (Japan) and its translation supplied by applicant.

Lysson et al (See the Figure) disclose all that is recited in claim 31 except a lower portion of a bottom chimney with a decreasing cross-sectional area. Specifically, Lysson et al disclose an optical fiber drawing furnace comprising a furnace body having a susceptor (2), induction coil (5) and insulating material (3); element 11 and seal 12 which corresponds to the instant top chimney and mechanical seal and element 7 which corresponds to the instant bottom chimney. It is clear that conditioning gas would be forced in a downward direction in view of arrows 21. With regard to claims 32 and 33, the examiner takes the position that the conditioning gas of Lysson et al would inherently pass through the claimed angle ranges in view of the change of direction of the downward arrows 21 depicted by Lysson et al in the Figure. JP 08091862 disclose a related optical fiber drawing device in Fig. 1 and show the use of nozzle 20 located at the bottom of element 17 which corresponds to the instant bottom chimney. The translation in the last sentence par [0027] explains that nozzle 20 prevents atmospheric air from seeping into the furnace. It would have been obvious for one of ordinary skill in

the art to have installed the instant lower portion, i.e. nozzle, on element 7 of Lysson et al for the reason disclosed by JP 08091862.

Claims 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lysson et al (5,897,681) in view of 08091862 (Japan) and its translation supplied by applicant as applied to claims 31-33 above, and further in view of EP 0 867 412.

EP 0 867 412 disclose graphite felt that has been rigidified used as insulation for fiber drawing induction furnaces (Col. 1, lines 7-10, and paragraph bridging pages 2-3). The felt consists of graphite fibers (Col. 3, lines 1-3). EP 0 867 412 shows a variety of shapes and sizes of the insulation material (See Figs. and entire disclosure). This rigidified graphite material is superior to prior art insulation (See Col. 1, line 15 ff). It would have been obvious to use this superior insulation in the apparatus of Lysson et al in order to obtain its benefits as taught by EP 0 867 412. It would be within in the purview of one of ordinary skill in the art to determine additional claimed features such as size, curved shape and fiber orientation dependent on the insulation requirements and in view of teachings of EP 0 867 412 where a plurality of different shapes and insulation sizes are shown.

Claims 34-45 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The cited prior art does not show or reasonably suggest the details of claim 34 in a fiber optical fiber drawing furnace having a susceptor, induction coil and insulating

Response to Arguments

Applicant's arguments filed 6-11-03 have been fully considered but they are not persuasive.

It is argued that Lysson introduces the gas perpendicular to the preform and that the downward motion is merely the eventual direction the gas takes; that does not meet the claim requirement that the gas is introduced in a downward direction. This argument is not persuasive for the following reason: The claim does not require that the introduction occurs in a downward direction. By means of the Lysson distributor, the conditioning gas is uniformly introduced into the top chimney and forcedly directed in a downward direction. If the distributor was not there, there would be no gas to go in the downward direction. The claim does not require that the distributor is the ONLY structure which causes the downward flow, but it is clear that the distributor is an agent by which gas from the line 13 is directed downward.

It is still further argued that the gas is not "forcedly directed". It is forcedly directed in as much as instant invention has forcedly directed gas. The pressure of the gas forces it downward into a region of less pressure.

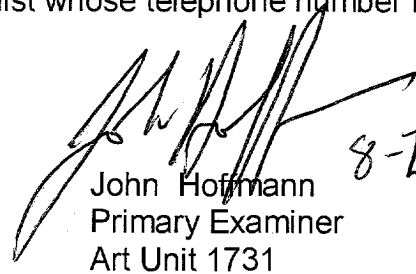
It is further argued that the gas is not supplied uniformly. Supplying gas is a method step: the present claims are apparatus claims. One can use the obvious structure to supply the gas uniformly (i.e not varying in pressure or composition).

Art Unit: 1731

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


John Hoffmann
Primary Examiner
Art Unit 1731
8-21-03

jmh